## **CLAIMS**

1. A method of image improvement in a virtual presence architecture (VPA), the method comprising:

a host computer in communication with a virtual presence server (VPS),

a remote computer in communication with a virtual presence client (VPC),

on each new screen resolution that is received by a VPS, adjusting a screen border
to correspond with the new screen resolution;

identifying whether the adjusted screen border is near an expected location; and if no border is found close to the expected border location, discarding the adjusted screen border and loading a predetermined set of values for the screen border instead.

- 2. The method of claim 1, wherein the predetermined set of values for the screen border is the Video Electronics Standards Association (VESA) set of standard values.
- 3. The method of claim 1, wherein the adjusting is performed by setting a capture engine to move the screen down and to the right.
- 4. The method of claim 1, wherein the user is prompted to manually adjust said plurality of borders of a screen corresponding with the new screen resolution.
- 5. The method of claim 1, wherein the VPA automatically adjusts said plurality of borders of a screen corresponding with the new screen resolution.

6. A method of image improvement in a virtual presence architecture (VPA), the method comprising:

entering a phase locked loop (PLL) adjustment cycle each time a new screen resolution is detected;

trying a range of PLL values to detect a best value; capturing two screens and comparing them;

if no acceptable match is found by the comparison, adjusting the tile color sensitivity and trying a complete set of values again; and

if no acceptable match is found again, reverting back to a set of factory settings.

- 7. The method of claim 6, wherein if during the screen capturing the captured screens include a number of randomly scattered color tiles above a threshold value, interpreting said tiles as noise and filtering the tiles out of the image.
- 8. The method of claim 6, wherein if during the screen capturing the captured screens have less than a threshold value of difference between each other or if less than a threshold value of color tiles are changing, the changes in the screens will be interpreted as real video data changes.
- 9. The method of claim 8, wherein step of the trying of a range of PLL values includes the step of capturing two screens and comparing them.

- 10. The method of claim 6, where the step of capturing and comparing takes place on two screens within 25 milliseconds of each other.
- 11. The method of claim 6, wherein on a subsequent try of a range of PLL values, a different algorithm is used than on an initial try of a range of PLL values, and further comprising:

examining an area and a number of changes in the color tiles of two screens to determine if the changes are the result of a PLL lock or valid data changes; and if the changes are a result of a PLL lock, adjusting the PLL parameters.

12. The method of claim 6, wherein the VPA comprises a host computer communicating with a virtual presence server and a remote computer communicating with a virtual presence client, the method further comprising:

causing the virtual presence server and the virtual presence client to communicate, thus allowing remote access to the host computer.

13. An apparatus for image improvement in a virtual presence architecture (VPA), the apparatus comprising:

a host computer in communication with a virtual presence server (VPS), a remote computer in communication with a virtual presence client (VPC), at least one from the group consisting of:

> a system for entering a PLL adjustment cycle, or a system adjusting a plurality of borders of a screen,

to provide image perfection in the virtual presence architecture on each new screen resolution that is detected.

- 14. The apparatus of claim 13, wherein said PLL adjustment cycle captures and compares two screens that are to be displayed within a certain amount of time of each other.
- 15. The apparatus of claim 14, wherein if said captured screens include a number of randomly scattered color tiles above a threshold value, interpreting said tiles as noise and filtering them out of the image.
- 16. The apparatus of claim 14, wherein if said captured screens have less than a threshold value of difference between each other or if less than a threshold value of color tiles are changing, the changes in the screens will be interpreted as real video data changes.